

Environmental Monitoring Report

Project Number: 41193-019
Semi-Annual Report
December 2020

MON: Western Regional Road Corridor Investment Program, Tranche 2

Prepared by the Project Implementation Unit (Ministry of Roads and Development) for the Government of Mongolia and the Asian Development Bank.

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MINISTRY OF ROAD AND
TRANSPORT DEVELOPMENT
OF MONGOLIA



ENVIRONMENTAL MONITORING REPORT

NOVEMBER 2019 - DECEMBER 2020

WESTERN REGIONAL ROAD CORRIDOR INVESTMENT PROGRAM

PROJECT
IMPLEMENTATION
UNIT

1. INTRODUCTION

This report aims to summarize environmental requirements and activities carried out by the active construction lots in 2020, though only minor works by domestic contractors were conducted on site in 2020 and no any environmental monitoring activities were undertaken in the reported period due to the COVID-19 pandemic situation.

This report covers the period from the last monitoring report, November 2019 to the December 2020. The contract for the Environmental Safeguard Consultant was not renewed in 2020 as contractors would not be able to mobilize and major construction works were not expected due to COVID-19.

Recommended EMP implementations actions for the next construction season are provided at the end of the report.

2. PROJECT DESCRIPTION

2.1. Ulgii Bypass road

The road construction works 18.82 km Ulgii Bypass road with concrete bridge along Asian Highway AH-4 corridor project consists of following three packages:

- a. Contract Lot CW1: covering road section from the starting point till the bridge (6.76 km) has been awarded to M/s Khotgor Zam LLC,
- b. Contract Lot CW2: covering bridge construction (201.08 m) and 260 m road, Lot CW2 has been awarded to M/s HKB International Holding LLC,
- c. Contract Lot CW3: covering road section from bridge till the finishing point (11.80 km) and 4.5x4.65 m underpass has been awarded to M/s HKB International Holding LLC

The Contract Agreements for the construction works of all lots signed on the 27 March, 2020.

Due to spread of COVID-19 Pandemic M/s HKB International Holding LLC could not start the construction work of Lot CW2 & CW3 from May, particularly no construction activities carried out in the Lot CW2.

In 2020, only M/s Khotgor zam carried out construction activities for both Lots CW1 & CW3 as the main and sub-contractor respectively. The progress of the Lots CW1 & CW2 was behind the planned schedules and the reasons of the delay related to the pandemic condition i.e. non-mobilization of the foreign manpower and equipment required for the construction work.

Figure 1. Location of Ulgii Bypass road



2.2. Access road to Must soum

Within the Tranche-1 phase of the WRRICIP, a 300km road which connects Altai soum to Khovd city was constructed between 2012-2015. Construction of a 20.3km access road which connects the Must soum center to the Tranche-1 road has commenced in April, 2019 as an additional component for the project. The Government of Mongolia had proposed to construct 20.3 km access road to Must soum against the savings of Loan No. 2847-MON. ADB has agreed to finance the project. Construction of 20.3 km access road to Must soum shall be financed by various sources of investments such as ADB loan agreements No. 2847-MON and No. 3129-MON, and the State budget fund of Mongolia. The Construction of 20.3 km access road from the main road of WRRICIP to Must soum had been awarded to the Mongolian Contractor M/s Khotgor Zam LLC. M/s Intercontinental Consultants and Technocrats Pvt. Ltd of India in Joint Venture with Swedish National Road Consulting AB and in association with ICT Sain Consulting LLC of Mongolia have been appointed Consultant for Construction Supervision of the Works.

3. CONSTRUCTION WORK PROGRESS

3.1. Ulgii Bypass road, Contract Lot CW1

Contract Lot CW1 6.76 km section	Contractor: Khotgor Zam LLC	Construction progress as of October 30, 2020: 36.11%
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The Contractor started the road construction work on the 5 May, 2020. The contractor has mobilized 187 construction workers and 42 number of machineries and equipment during the 2020 construction season. Top layer of the embankment has been completed in 6.5km i.e. 85,104.70 m³, the cutting completed 144,974.20 m³ and half cuttings alongside the road: km1+200 km1+300 hard excavation: biggest cutting between km6+300 ~ km6+500, sub-base completed in 2 km between km 2+800 ~ km 4+800, the pipe culvert at 10 locations and 161 m pipes were completed, the all box culverts main body and headwalls & wing walls completed. The contractor has opened three borrow pits at STA.1+200, STA.1+300 and STA.6+400.

The Contractor has closed the working season of this year from October 12, 2020 and submitted the winter work program.

3.2. Ulgii Bypass road, Contract Lot CW2

Contract Lot CW2 Construction of 201.08 m concrete bridge	Contractor: HKB International Holding LLC	Construction works not commenced yet
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The construction commencement was delayed due to the border entry restriction placed by the Government of Mongolia as part of control measures for curbing potential spread of COVID-19 pandemic. The Commencement of construction is re-scheduled to April 2021.

3.3. Ulgii Bypass road, Contract Lot CW3

Contract Lot CW3 11.8 km road section	Contractor: HKB International Holding LLC	Construction progress as of October 30, 2020: 17.25%
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In order to avoid causing delay in the project progress, the contractor submitted his request to subcontract for the construction of CW3 to the PIU. The PIU provided his approval for subcontracting by the letter No. 101 dated 1 July, 2020. Accordingly, the road construction work of the Lot CW3 was started in July, 2020 by the M/s Khotgor zam LLC, the sub-contractor.

The sub-contractor has mobilized 46 construction workers and 18 number of machineries and equipment during the 2020 construction season. Embankment works progressed to 62% i.e. 128,965.11 m³, the cutting completed in 21,000.24m³ i.e. at km7+780 ~ km7+880 and km8+040 ~ km8+420. The sub-contractor has opened two borrow pits at STA.7+800, STA.1+300 and STA.8+400.

The Contractor has closed the working season of this year from October 12, 2020.

3.4. Access road to Must Soum

Construction works of the Must road has commenced in April 2019 and the civil works contractors has implemented mitigations measures following to the requirements set out in the IEE/EMP for Tranche-

2 phase. Construction progress was at 85% at the end of October 2019 and 19.5km road section out of a total of 20.3 km were already completed pavement works. The remaining construction works were carried out between April and June of 2020.

The Contractor has mobilized total 84 labors and 20 numbers of equipment, machineries including plants at the project site. These resources were deployed on activities of completion of the remaining works such as gravel shoulder (second layer), filling of the contraction joint for each 5 m and expansion joint for each 25 m with bitumen for 300m and 500m causeway, grouting of the stone pitching with 150 mm thickness and 200 mm thickness of the slope 500 m causeway, backfilling with stone for the slope of 500 m causeway, road marking of the centerline, installation of the road signs and km posts, guard rail, construction of footpath, construction of new pipe culvert with 1.5 m diameter, reinstatement of the borrow areas and quarry and clearance of the road sides. The overall construction progress is 100%.

The State commission under Ministry of Road and Transport Development have visited to the project site and inspected the works and handed over on 19 June 2020.

4. ENVIRONMENTAL SAFEGUARD

4.1. Ulgii Bypass road

Environmental Department of the Bayan-Ulgii province has issued a General Impact Assessment for the 18.8km new road section on February 26, 2019, which concludes that no DEIA is needed and the project may proceed with specific conditions (EMP is needed). Based on this requirement, the PIU Environmental monitoring consultant has prepared an Environmental Management Plan for the Ulgii Bypass road which was reviewed and approved by the Bayan-Ulgii provincial authority in March 2019.

Additionally, an Environmental Due Diligence Report was prepared by the PIU Environmental monitoring consultant in June, 2019 which was then reviewed and cleared by ADB. The Environmental Due Diligence Report provided description of the baseline environmental condition in the road corridor, anticipated impacts of construction works, mitigation measures and Environmental Management Plan. Within the Environmental Management Plan, the impact mitigation measures were described by providing coverage, corresponding national environmental standards, responsible parties, timeframe and necessary budgets.

The civil works contractors are responsible for implementing the mitigation measures specified in the Environmental Management Plan while the PIU environmental monitoring specialist is responsible for supervision of the Environmental Management Plan implementation and compliance during the construction period which started in May 2020. However, the PIU environmental specialist's contract was expired in December 2019 and was not extended for 2020 due to the COVID-19 pandemic situations. Therefore, neither environmental monitoring activities nor compliance checking site visits were conducted in 2020.

However, the Environmental Management Plan has been prepared by the Contractors according to the Construction Contract and Section 139, 140 (Managing environmental quality) of Technical specification and verified and approved by the Consultant. The implementation of the measures outlined in above plan by the Contractor as follows:

- **Soil:** After removal of topsoil, the vegetative soil was piled along the road side to prevent it from spreading into the air due to vehicle traffic or sticking to the tires. This also acted as a barrier to the flow of rain from the mountain side. The soil should be used for the rehabilitation of quarries, borrow pits and other required rehabilitation areas upon completion of construction works.
- **Temporary road:** The temporary road was constructed for vehicles transporting of construction equipment and materials. The road warning signs were placed at the area with limited visibility, deep ravines and entrance/exit of cutting area. The watering has been made at the active construction spots and temporary road regularly to minimize dust.
- **Fume from plant and equipment:** The Specialized Inspection Agency of Bayan-Ulgii aimag conducted preventive inspection and issued instructions on equipment, plant exhaust fume and electrical safety. No complaints were received as the construction and plant camp was located more than 1 km from the residential area in accordance with the Technical Specification of the project.
- **Road traffic safety:** According to the Clause 700 “Passage of traffic” of the Project technical specifications, the Contractor is responsible for ensuring safety conditions of the project road during the contract period. The safety measures including provisions of the road signs and barriers on the project road and deviations for Lots CW1 & CW3 i.e. 9 barriers and 19 numbers of road sign have been provided on the project road.



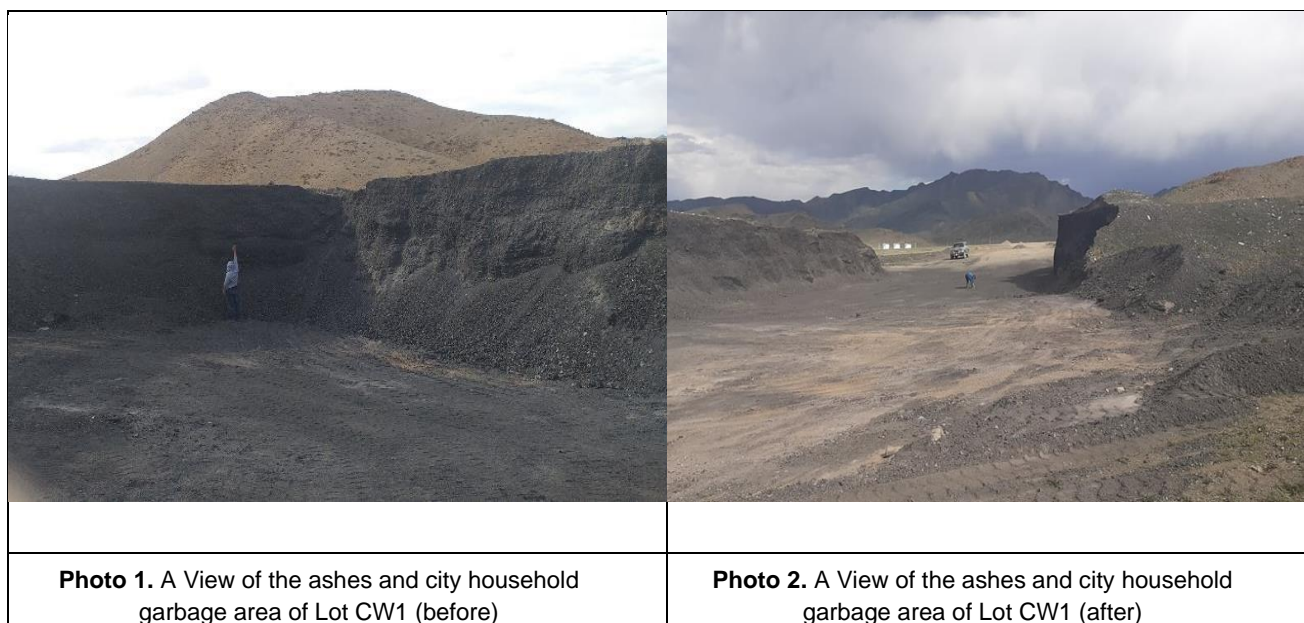
Photo 3. Warning, informative and prohibition signs at Ch 0+020 /Start of the project road/



Photo 4. Warning, informative and prohibition signs at Ch12+200 /at temporary access road to Ulgii City direction/

- **Livestock movement:** The residents and herders often cross the project road to graze their livestock towards the Bukhun Mountain. The crossing for livestock was constructed in order to bound this movement as much as possible.
- Alongside the project road alignment, nearby km 0+960 - km 1+020, there are dump of ashes and household waste were found. The design report /Page 31/ states that “*There is a dump of thick soil found. This dump of soil was not considered particularly.*” The pavement level is designed above this dump of soil /or ashes/. Sampling was made from the place for laboratory testing and the result was unsuitable. In addition, a sample of ashes was tested in the Specialized Inspection Agency laboratory in UB for toxic and hazardous component.

The result was appropriate and Specialized Inspection Agency, Bayan-Ulgii province instructed to bury ashes into the existing big hole of borrow area and make a technical reinstatement. Therefore, unsuitable material was removed and filled of suitable material.



- Comments from residents:* The road of this packages passes through the territory of 1st, 2nd, 3rd and 12th baghs of Ulgii soum of Bayan-Ulgii aimag and Contractor and community outreach officers met with the residents of the bagh and listened to their comments/complaints. The measures were taken to make residents aware that Contractor needed to work late at night in accordance with the construction requirements. According to the comments/complaints, the frequency of watering for temporary road was increased and inspected and as per request of some residents, a stone drainage system was constructed around the households where rainwater accumulates.

4.2. Access road to Must soum

The PIU environmental monitoring consultant has visited the construction 3 times during the 2019. Results of environmental monitoring activities, Environmental Management Plan implementation status were included in the semi-annual Environmental Management Plan reports for 2019.

The Contractor has reinstated all of borrow areas that they used for the construction works and obtained the certificate from the local authorities in June 2020. The deviation road used during the construction period has been also reinstated properly and in satisfaction to the Local Governor.

No any environmental monitoring activities were conducted in 2020.



5. CONCLUSION AND RECOMMENDATIONS

There were three active construction lots in 2020: Lots CW1 and CW3 of the Ulgii Bypass road and 1 for the Must access road. The Construction of 20.3 km access road to Must soum center is completed and handed over by the State Commission in June 2020. The Contractor has reinstated all of borrow areas and deviation roads that they used for the construction works and obtained the certificate from the local authorities in June 2020.

Construction works at the three contract lots of Ulgii Bypass road will continue in 2021 while two more new contract lots will commence construction in 2021 spring: 20 km access road to Erdeneburen soum center and 17 km access road to Khovd soum center.

The PIU environmental specialist's contract was expired in December 2019 and was not extended for 2020 due to the COVID-19 pandemic situations. Therefore, neither environmental monitoring activities nor compliance checking site visits were conducted in 2020.

Following environmental actions are recommended for the 2021 construction season. These include:

1. In order to supervise Environmental Management Plan implementation and carry out environmental monitoring activities, contract for the PIU environmental specialist need to be extended as soon as possible;
2. As required by the ADB SPS, Environmental Due Diligence study need to be made for the two new contract lots: 20 km access road to Erdeneburen soum center and 17 km access road to Khovd soum center which shall provide description of baseline environmental condition, anticipated environmental impacts of the project, mitigation measures and Environmental Management Plan.

3. In order to fulfill domestic requirements, the PIU needs to prepare and Environmental Management Plan in Mongolian language which shall be reviewed and approved by the Khovd provincial administration.
4. The PIU environmental specialist shall have site visits to each construction lot on quarterly basis to inspect Environmental Management Plan implementation and conduct monitoring of environmental parameters.
5. Semi-annual environmental monitoring report needs to be prepared and submitted to ADB in a timely manner: in July 2021 and November 2021.